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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/485,074	09/27/00	LAUBLE	C 10537/68

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PM82/0605

EXAMINER	
BURCH, M	
ART UNIT	**PAPER NUMBER**
3613	9

DATE MAILED: 06/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/485,074	Applicant(s) LAUBLE ET AL.	
	Examiner Melody M. Burch	Art Unit 3613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 September 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *9/27/00* is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7 .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to because:

- "Figur" should be changed to --Figure-- for all of the figures.

Correction is required.

2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

Specification

3. The abstract of the disclosure is objected to because:

- In line 5 the phrase "Metal and/or" should be deleted since the specification only supports rubber spring elements;
- In lines 5-6 the use of the phrase "spring stop elements" is unclear since the specification describes the spring elements and the stop elements as separate components;
- In line 7 the use of the claim language such as "said" is improper.

Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: the use of claim language such as "said" as seen on pg. 7 line 24 is improper.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 5 the phrase "carrying on an outer contour the mass body" is indefinite.

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not support the limitation of metal stop elements as claimed in the last two lines of the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticiapted by FR-2720132. FR-2720132 shows in figure 5 a vibration damper capable of being used for a tubular propeller shaft in the drive train of a motor vehicle, the vibration damper comprising: a propeller shaft 10 defining a radial and circumferential direction, a mass body 20 arranged concentrically in the propeller shaft, a plurality of rubber spring elements 3 for mounting the mass body to the propeller shaft, wherein at least one of the mass body and the propeller shaft at least partially form, in circumferentially opposite regions between the rubber spring elements, a plurality of stop elements 111 for limiting a vibration travel of the mass body in at least the radial direction.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 9, 10, 15, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hori.

Re: claims 9, 10, and 17. Hori shows in figure 1 a vibration damper capable of being used for a tubular propeller shaft in the drive train of a motor vehicle, the vibration damper comprising: a sleeve 14,36 the sleeve defining a radial and circumferential

direction, a mass body 12 mounted concentrically in the sleeve, a plurality of spring elements shown at element numbers16, 24,25, 27,25 for mounting the mass body to the sleeve, and a plurality of flexible stop elements top and bottom 34 and left and right 32 disposed circumferentially between the spring elements and disposed between the mass body and the sleeve for limiting a vibration travel of the mass body at least in the radial direction, wherein the stop elements extend over a larger circumferential angle than the spring elements and occupy a large portion of a space between the mass body, the spring elements and the sleeve as shown in figure 1, but does not specifically disclose that the spring elements are rubber.

Hori teaches in col. 1 lines 21-23 the use of the elastic members of a vibration damper being composed of rubber. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the spring elements of the vibration damper of Hori shown in figure 1 to be composed of rubber or any suitable elastic material, as taught by Hori in figure 7, in order to provide good shock absorbing properties.

Re: claim 15. Hori shows in figure 2 the sleeve 14,36 further defining an axial direction wherein the mass body 12 is mounted axially between at least two of the plurality of spring elements 27 and the unnumbered spring element on the opposite side of element 32 and the sleeve 14,36 fits axially around the mass body 12 as shown in figure 2.

Re: claim 16. Hori shows in figure 2 the sleeve including a tubular segment 36 having two sides (the side to which the line connected to element 30 points and the

opposite side that abuts with element 32) and two end faces (unnumbered end faces – one face shown immediately to the right of element number 36 and the other face shown immediately to the left of element number 30), planar disc-shaped regions being included at both end faces, the plurality of spring elements being attached to the disc-shaped regions.

13. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR-2720132 in view of Hori.

Re: claims 11 and 13. FR-2720132 shows in figure 5 a sleeve 10, the sleeve defining a radial and circumferential direction, a mass body 20 mounted concentrically in the sleeve, a plurality of rubber spring elements 3 for mounting the mass body to the sleeve, wherein at least one of the mass body and the sleeve at least partially form, in circumferentially opposite regions between the rubber spring elements, a plurality of stop elements 111 for limiting a vibration travel of the mass body in at least the radial direction, but does not disclose the limitation wherein the stop elements 111 extend over a larger circumferential angle than the spring elements.

Hori teaches in figure 1 the use of stop elements 32,34 that extend over a larger circumferential angle than the spring elements 16, 24, 25, 27. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the spring elements of the vibration damper of FR-2720132 to extend over a smaller circumference than the stop elements, as taught by Hori, in order to provide the damper with less resilience, a property that may be altered depending on the application in which the damper is utilized.

Re: claim 12. Hori teaches in figure 7 the use of a rubber 91 on stop element 82. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the stop elements of FR-2720132, as modified, to include rubber, as taught by Hori, in order to provide a shock absorbing means between the stop elements and any surfaces (the outer surface of the mass body 20) with which it may abut.

14. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hori in view of Shimazaki et al. Shimazaki et al. teach the use of a propeller shaft 21,211 mounted concentrically with a sleeve 132,134 wherein the sleeve includes a first 132 and second 134 tube segment joined together, the first tube segment having a greater outside diameter than an outside diameter of the second tube segment and corresponding approximately to an inside diameter of the propeller shaft 21,211, the second tube segment 134 carrying on an outer contour of the mass body 131, a least a portion of the plurality of spring elements 133 connecting the second tube segment 134 to the mass body 131, the mass body being annular at least in an area of connection with the second tube segment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the vibration damper of Hori, as modified, to include a propeller shaft concentric with the sleeve, as taught by Shimazaki et al., in order to provide a means of connecting the sleeve to a drive train of a motor vehicle.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have modified the sleeve of Hori, as modified, to include two tube segments of different diameters joined together and arranged, as taught by shimazaki et al., in order to provide reinforced structural integrity between the propeller shaft and the mass body during the course of the vibration travel.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents: 4935651 to Hong et al. figure 2, 4571215 to Hansen figure 4, 4471935 to Chiba et al., 1850210 to Krotee, 5865429 to Gautheron, 4655614 to Schott, 4826145 to Moore et al., 4659069 to Odobasic figure 5 and EP-0009120 teach similar inventions.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Oberleitner can be reached on 703-308-2569. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

17. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmb
June 1, 2001

ROBERT J. OBERLEITNER
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